

ABSTRACT OF THE DISCLOSURE

The modulation/demodulation unit modulates information to be transmitted, or demodulates information received. The time slot control unit assigns time slots to a terminal apparatus when the base station apparatus establishes connection with the terminal apparatus. The quality derivation unit derives the quality of the transmission links as appropriate. The modulation mode control unit determines the modulation modes suitable for the quality of the transmission links for the up link and down link, respectively. Moreover, when the remaining period of the time slots is greater than or equal to a threshold value, the modulation mode control unit determines to change the modulation modes currently in use into the modulation modes determined. When the remaining period is smaller than the threshold value, the modulation mode control unit determines to keep using the modulation modes currently in use without changing to the modulation modes determined.